

# You, Me & SVG!



Level 4

# SVG Encore!

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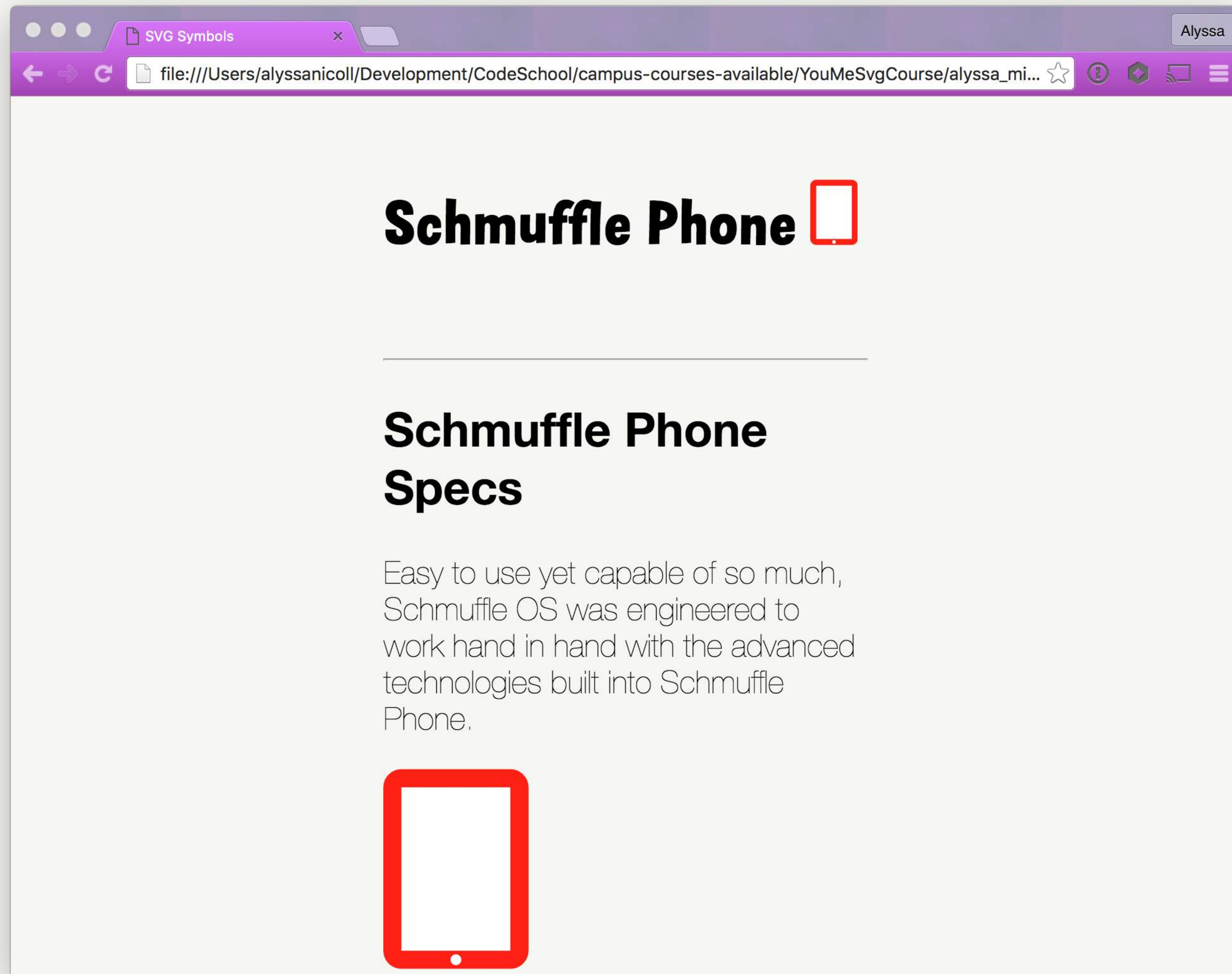
## Section 2 – Symbols to Use

**You, Me  
& SVG!**





# Icons Everywhere



# Icons Everywhere

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>

    <svg xmlns="http://www.w3.org/2000/svg" class="defined-icon">
      <rect x="5" y="5" width="70" height="100" rx="5"/>
      <circle r="3" cy="105" cx="40"/>
    </svg>

    <h2>Schuffle-Phone Specs</h2>
    <p>Easy to use yet capable of so much, Schuffle OS
was engineered to work hand in hand with the advanced
technologies built into Schuffle Phone.</p>

    <svg xmlns="http://www.w3.org/2000/svg">
      <rect height="100" width="70" x="5" y="5" rx="5"/>
      <circle r="3" cy="105" cx="40"/>
    </svg>

    ...
  </body>
</html>
```

**...If you need to use an icon in multiple places on your page, the duplicate SVG can get a bit out of control!**

# Symbol Is for Reusable Elements!

The symbol element stores the SVG for later use.

```
<!DOCTYPE html>
<html>
  <head>...
</head>
<body>
  <svg xmlns="http://www.w3.org/2000/svg" class="defined-icon">
    <symbol id="phone">
      <rect x="5" y="5" width="70" height="100" rx="5"/>
      <circle r="3" cy="105" cx="40"/>
    </symbol>
  </svg>
</body>
</html>
```

**Code to draw icon goes inside symbol**

style.css

```
.defined-icon {
  display: none;
}
```

**Just define the icon –  
do not display it.**

# Styles Still Being Applied Through CSS

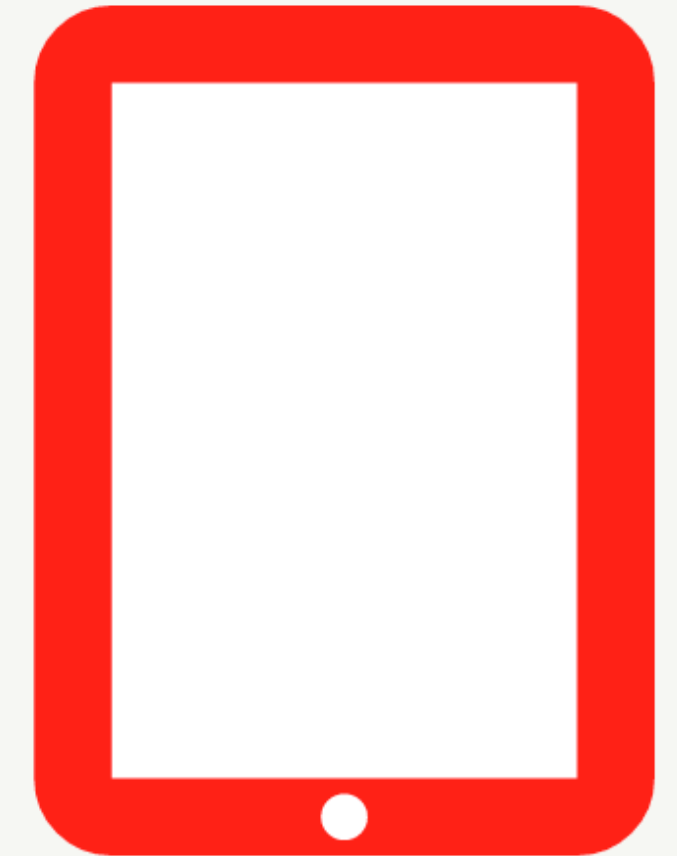
```
<!DOCTYPE html>
<html>
  <head>...
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <svg xmlns="http://www.w3.org/2000/svg" class="defined-icon">
      <symbol id="phone">
        <rect x="5" y="5" width="70" height="100" rx="5"/>
        <circle r="3" cy="105" cx="40"/>
      </symbol>
    </svg>
  </body>
</html>
```

**Styles are already being applied with existing CSS**

style.css

```
#phone rect, #phone circle {
  fill: white;
}

#phone rect {
  stroke: #FF2626;
  stroke-width: 10px;
}
```



# Displaying the Icon With <use>

The use tag references the id of an element, group, or symbol and displays it inline where it is.

```
...  
<svg xmlns="http://www.w3.org/2000/svg" class="defined-icon">  
  <symbol id="phone">  
    <rect x="5" y="5" width="70" height="100" rx="5"/>  
    <circle r="3" cy="105" cx="40"/>  
  </symbol>  
</svg>  
...  
viewbox goes on second svg  
<svg xmlns="http://www.w3.org/2000/svg"  
  viewBox="0 0 80 110"  
  class="displayed-icon">  
    version="1.1"  
    xmlns:xlink="http://www.w3.org/1999/xlink">  
      <use xlink:href="#phone"/>  
</svg>  
...
```

**Must be an id,  
not a class!**



In order to use XLink, you need to specify an XLink namespace on the SVG that will be using XLink!

# Use Tag for External Sources

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The use tag's XLink points to a named anchor. This can also be an outside source (like a file):

```
<use xlink:href="path-to-file.svg#phone" />
```



**Unfortunately, external references don't work in IE10 and below.**



# Give the Displayed Icon Responsive Width

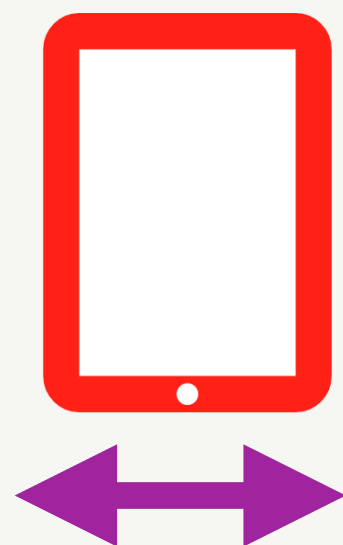
```
...  
<svg xmlns="http://www.w3.org/2000/svg" class="defined-icon">  
  <symbol id="phone">  
    <rect x="5" y="5" width="70" height="100" rx="5"/>  
    <circle r="3" cy="105" cx="40"/>  
  </symbol>  
</svg>  
...  
<svg xmlns="http://www.w3.org/2000/svg"  
  viewBox="0 0 80 110"  
  class="displayed-icon">  
  <use xlink:href="#phone"/>  
</svg>  
...
```

style.css

```
#phone rect, #phone circle {  
  fill: white;  
}
```

```
#phone rect {  
  stroke: #FF2626;  
  stroke-width: 10px;  
}
```

```
...  
.displayed-icon {  
  height: auto;  
  width: 30%;  
}
```



**We are using the symbol now, but let's go ahead and give it a responsive width!**

```
index.html style.css
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <meta charset="utf-8">
5     <title>SVG Symbols</title>
6     <link rel="stylesheet" href="style.css" charset="utf-8">
7   </head>
8   <body>
9     <div class="wrapper">
10      <svg xmlns="http://www.w3.org/2000/svg" version="1.1" class="defined-icon">
11        <symbol id="phone">
12          <rect height="100" width="70" x="5" y="5" rx="5"/>
13          <circle r="3" cy="105" cx="40"/>
14        </symbol>
15      </svg>
16
17      <h1>Schmuffle Phone
18        <svg xmlns="http://www.w3.org/2000/svg"
19          xmlns:xlink="http://www.w3.org/1999/xlink"
20          viewBox="0 0 80 110"
21          class="top-displayed-icon">
22          <use xlink:href="#phone"/>
23        </svg>
24      </h1>
25
```

# SVG Accessibility

Two SVG elements that we can use here to make our SVG more meaningful and accessible:

...

```
<svg xmlns="http://www.w3.org/2000/svg"
      xmlns:xlink="http://www.w3.org/1999/xlink"
      viewBox="0 0 80 110"
      class="displayed-icon">
```

```
<title>Schmuffle Phone Icon</title>
```

```
<desc>
```

A phone with a large red border with rounded corners, a white screen, and a white round button centered below the screen.

```
</desc>
```

```
<use xlink:href="#phone"/>
```

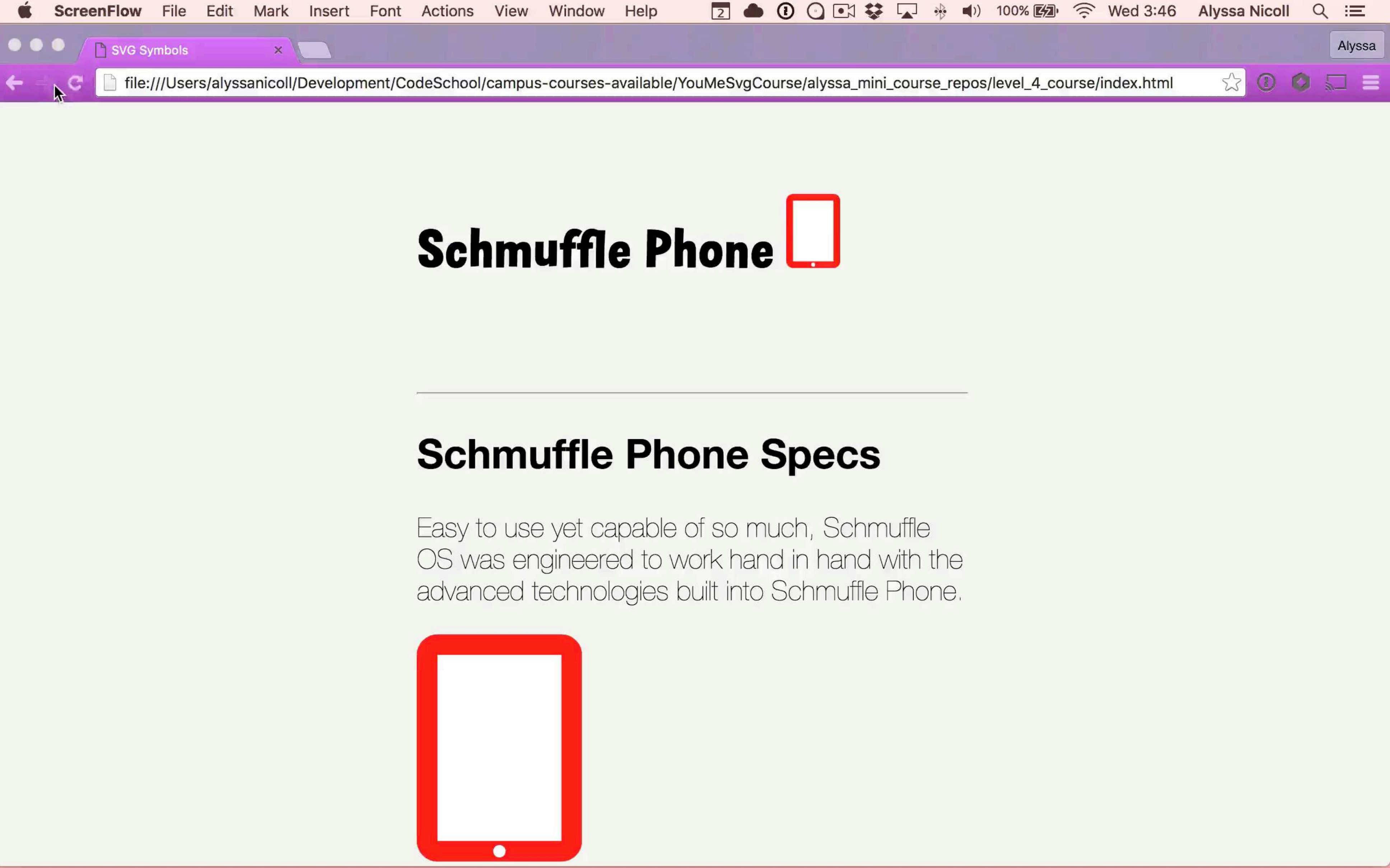
```
</svg>
```

**Label for the asset**

**A detailed description of what the asset looks like**



# Now Screenreaders Can Describe the SVG





# Challenges

